DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015817 Address: 333 Burma Road **Date Inspected:** 19-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Yang Bai Qiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Bay # 04, Deck Panel

QA inspector performed conventional Ultrasonic Testing (UT) Inspection of approximately 10% for Lack of Penetration (LOP) on deck panel weld areas previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as Deck Panels. The weld designations reviewed are as follows.

DP3099-001-001~006, 138~141, 173, 174, 176~181 DP3106B-001-001~006, 138~141, 173, 174, 176~181 DP3105-001-001~006, 138~141, 173, 174, 176~181 DP3100-001-001~008, 229~244

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 04, DECK PANEL REPAIR

WELDING INSPECTION REPORT

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13BE-DP3092-001

During random in process inspection this QA inspector observed that ZPMC personnel were performing repair welding on the Partial Joint Penetration (PJP) weld joints of deck panel 13BE-DP3092-001. Welder is identified as 062265. ZPMC CWI is identified as Mr. Yang Bai Qiang. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-FCM-Repair. The repair area details are as follows.

Weld: 005; Y location: 4450

Weld: 007; Y location: 2150, 2750

Weld: 009; Y location: 450

Weld: 171; Y location: 550, 3550 Weld: 175; Y location: 3550 Weld: 180; Y location: 50

Deck Panel Repair

This QA inspector observed that ZPMC NDT personnels were performing Magnetic Particle Testing (MT) after root pass on the repair locations of weld joint of deck panel. The weld designations reviewed are as follows.

13BE-DP3093-001 (5 Locations)

13CE-DP3102-001 (4 Locations)

13BE-DP3092-001 (13 Locations)

13CE-DP3104-001 (7 Locations)

13BE-DP3087-001 (7 Locations)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





WELDING INSPECTION REPORT

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

| Inspected By: | Gaikwad,Umesh | Quality Assurance Inspector |
|----------------------|-----------------|-----------------------------|
| Reviewed By: | Carreon, Albert | QA Reviewer |